

**LEVEL RADAR SENSOR - 15 METER ATEX**

**IDEAL USAGE**

Projects that require level measurement based on radar technology, providing high accuracy and meets requirements related to ATEX, Vlare and WHG

**APPLICATIONS**

- This Level Radar Sensor can be combined with all of UR's closed containment products in order to measure level, actual and/or remaining volume
- With the use of specific brackets and bespoke programming this device can be used also in other basins, (open) channels and sewers.



**TECHNICAL SPECIFICATIONS**

<b>Measuring range up to:</b>	15 m
<b>Deviation:</b>	≤ 2 mm
<b>Beam Angle:</b>	8 °
<b>Measuring Frequency:</b>	W-band (80 GHz technology)
<b>Output Signal:</b>	4 ... 20 mA/HART
<b>Process Fitting:</b>	Thread G1½
<b>Mounting Connection:</b>	Ceiling Adapter Special DN80/100 or ANSI 4"6" flange plates
<b>Max. applied pressure on sensor head:</b>	-1 ... +3 bar (-100 ... +300 kPa/- 14.5 ... +43.51 psig)
<b>Process Temperature:</b>	-40 ... +80 °C (-40 ... +176 °F)
<b>Ambient Temperature:</b>	-40 ... +80 °C (-40 ... +176 °F)
<b>Bluetooth Standard:</b>	Bluetooth 5.0
<b>Bluetooth Range:</b>	Typically 25 m
<b>Operating Voltage:</b>	12-35 V DC
<b>Protection Rating:</b>	IP66/IP68 (3 bar, 24 h) acc. to IEC 60529, Type 4X/6P acc. to UL 50
<b>Electrical Connection:</b>	Wire assignment in permanently connected connection cable
<b>Mounting Accessories:</b>	The suitable mounting accessories for ceiling or wall mounting is available Flange connection available, other brackets upon request
<b>Electronics:</b>	Two-wire 4 ... 20 mA/HART

**MATERIALS**

<b>Wetted:</b>	PVDF
<b>Process Seal:</b>	FKM (normally protected by PP membrane)
<b>Cable material / Length:</b>	PUR / 25 m (approx. 82 ft)

**Direct cable outlet**



Fig. 12: Wire assignment in permanently connected connection cable

	Wire colour	Function	Polarity
1	Brown	Voltage supply, signal output	+
2	Blue	Voltage supply, signal output	-

**BENEFITS**

- Maintenance-free operation due to non-contact 80 GHz radar technology
- Exact measuring results independent of product, process and ambient conditions
- Low overall height and safe measurement even in case of flooding
- Comfortable wireless setup and diagnostics with smartphone
- Lateral cable outlet, measuring range up to 15 meter, accuracy +/- 2 mm

**ADJUSTMENT**

**Wireless adjustment via Bluetooth:** The Bluetooth version of the device enables wireless connection to smartphones/tablets or Windows PCs

**Extra remark:** In order to protect bespoke setup, setting changes are protected by a second PIN-code

**APPROVALS**

**Explosion Protection:** ATEX/UKEX/IEC/c-FM-us/c-CSA-us; Installation Ex-free area, intrinsically safe supply Zone 0, 1, 2 (Class I Division 1, 2) + Zone 20, 21, 22 (Class II, III Division 1, 2)

**Approved as overfill protection:** With (certificate. as WHG conform limit alarm))

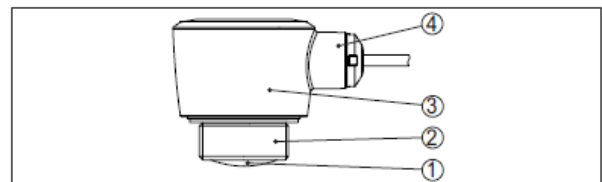


Fig. 3: VEGAPULS C 22 with direct cable outlet for ceil mounting in protection rating IP66/IP68 (3 bar)

- 1 Radar antenna
- 2 Process fitting
- 3 Electronics housing
- 4 Cable outlet

Devices with integrated Bluetooth module can be adjusted wirelessly via standard adjustment tools:

- Smartphone/tablet (iOS or Android operating system)
- PC/notebook (Windows operating system)

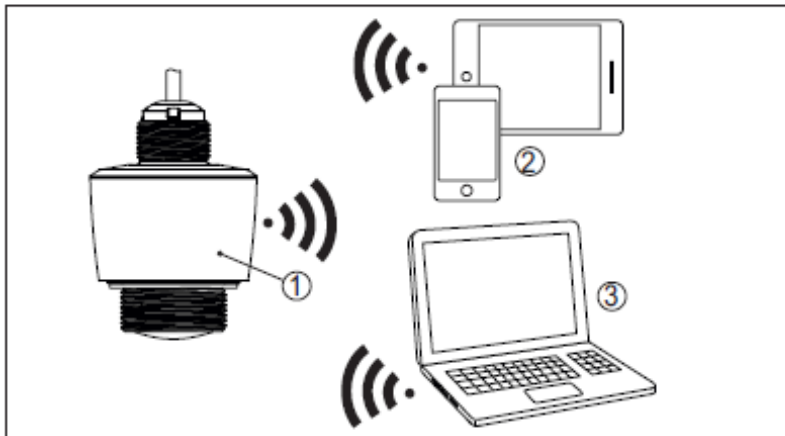


Fig. 18: Wireless connection to standard operating devices with integrated Bluetooth LE

- 1 Sensor
- 2 Smartphone/Tablet
- 3 PC/Notebook

## VEGAPULS C 22

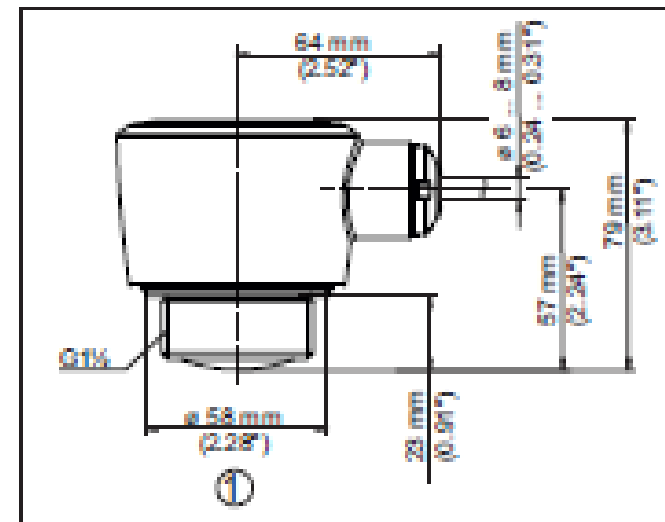


Fig. 23: Dimensions VEGAPULS C 22

1 Thread G1½